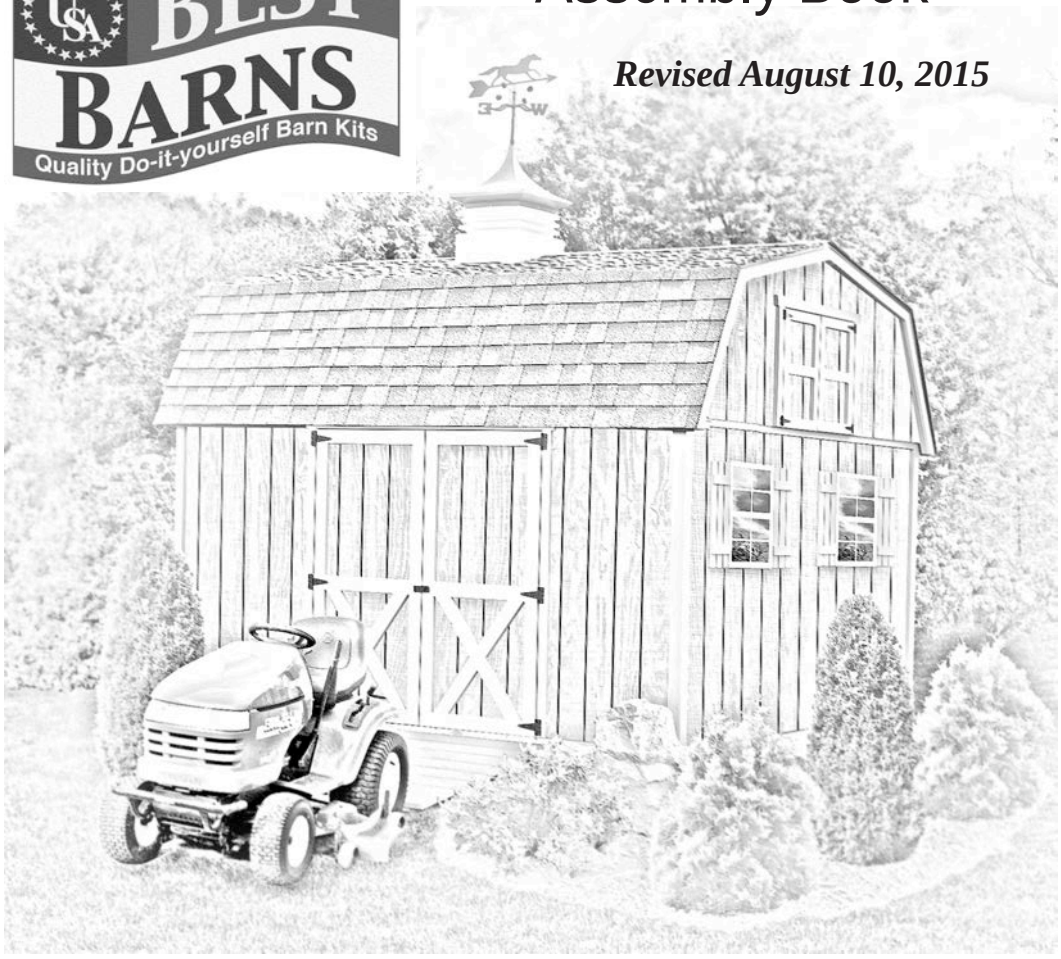
Best Barns USA
Assembly Book

Revised August 10, 2015



the Meadowbrook-R **12' x 10'**

Manufactured by Reynolds Building Systems, Inc.

205 Arlington Drive Greenville, PA 16125 724-646-3775

This manual is copyrighted. Under the copyright laws, this manual may not be copied, in whole or in part, without consent from Reynolds Building Systems, Inc. © Copyright 2011

Important Information About Your Shed Kit

This manual will show the assembly for the 12' x 10' Meadowbrook building kit. **If you received duplicate books, use the one with the latest revision date.**

The foundation size should measure 10'-0" deep by 11'-9" long. **Do Not** make the foundation larger than the building size. The siding should project beyond the foundation for water to expel properly from the sidewalls.

Read the instructions before starting the assembly of the building. If you have any questions about assembling the kit, call 800-245-1577. Business hours (8:00-5:00 ET) Monday thru Friday. After business hours call 724-866-HELP (4357) or email to help@barnkits.com.

The material that is included in our kit is listed on the back page. The optional floor package, if purchased, will be supplied by a local lumber supplier.

Our kit does not include the shingles, the quantity needed is listed under Step 14. The siding is primed. You will need to apply a finish coat using latex acrylic paint.

Some of the framing lumber was used in the shipping pallet. Unpack the material from the pallets, then unscrew the OSB sheathing, it will be used for the loft flooring. Unscrew the 2x4s from the shipping pallet. This material will be used for wall bracing and wall plates. The bit for the screws is packed in the hardware bag.

Stacking the boards, according to size, will make them easier to find when needed. Some boards have colored ends. All the 72" long 2x4s have black ends, stack these boards together**.**

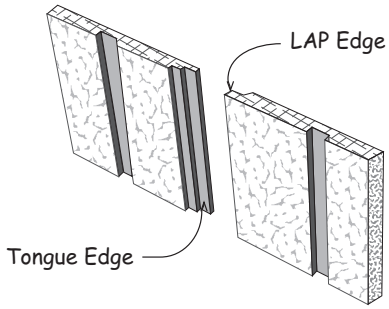
Before you begin construction, be sure to study this assembly manual. Also, obtain a building permit and check all pertinent building code regulations.

Thank you for your purchase.

Bill & Linda Rinella, owners

The siding is made in 4x8 sheets with grooves cut into the face, the long edge is beveled so that the siding overlays where they butt.

To identify which edge we want you to use, we will refer to the edge as either the 'LAP' Edge or the Tongue Edge. Nail siding with 8d galv. nails, spaced 12" apart.



Tool List

- ❑ Hammer & Phillips Screwdriver
- ❑ Framing Square & Level
- ❑ Hand or Circular Saw
- ❑ Power Drill/Screwdriver
- ❑ Measuring Tape
- ❑ **2 - 8' Step Ladders**

Always wear safety glasses when cutting or nailing!

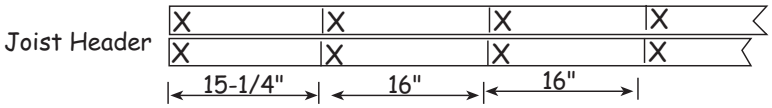
Constructing Details for Deluxe Floor System

Deluxe floors include 4x4 runners, standard floors do not

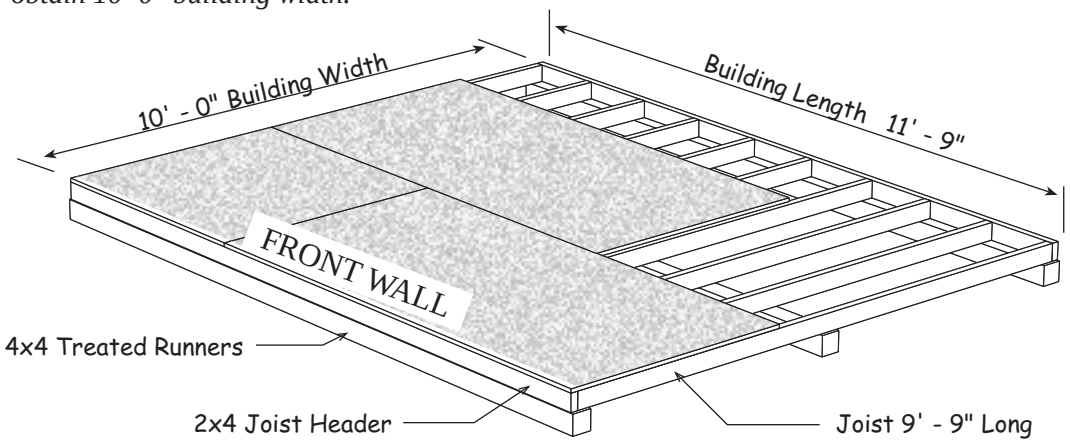
Foundation size is 10'-0" x 11'-9". Check local building codes in your area, the construction may have to change. For a concrete slab, install sill sealer as a moisture barrier between the concrete and the wall plates. Foam sill sealer can be purchased at home centers in rolls 3-1/2" or wider.

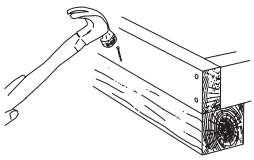
1. Cut joist headers to floor length. See Below.

   Layout for 16" on center joist spacing. 'X' marks where floor joist will be placed.



2. Cut 2x4-10' floor joist to 9'-9". *Treated lumber may be thicker than 1-1/2". Take this into account when cutting the length of floor joists. Shorten joist measurements if necessary to obtain 10'-0" building width.*





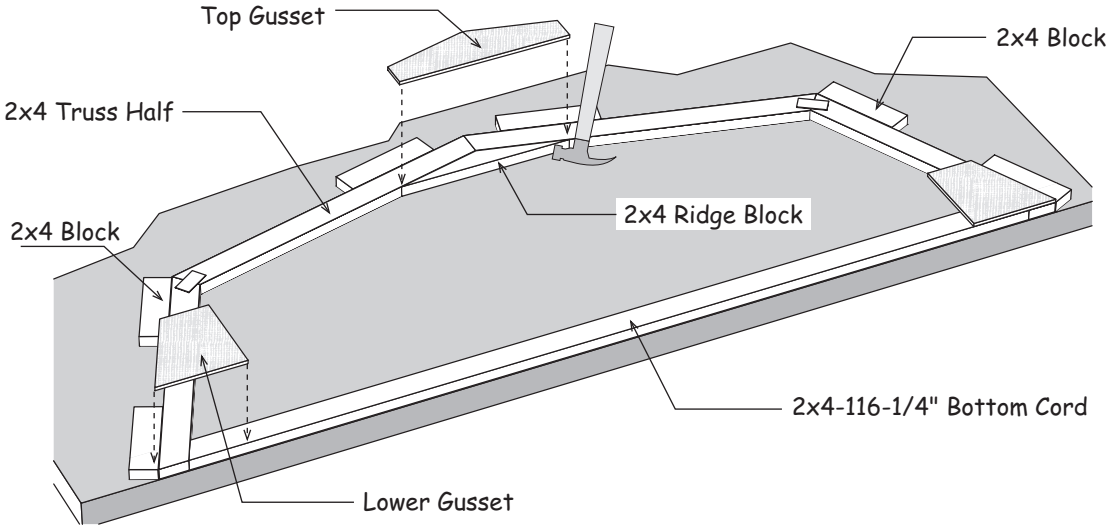
Nail the 2x4s to the 4x4 runners to keep the 2x4 frame from moving.

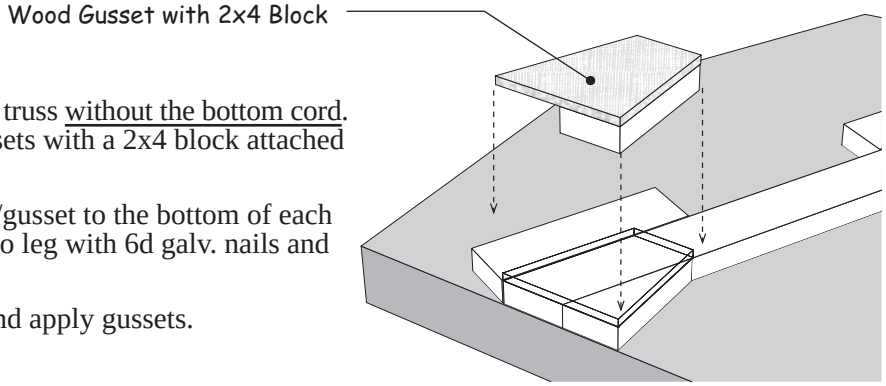
It is important that the floor be level and square. Before nailing the flooring, measure the floor diagonally (corner to corner). Then measure the opposite corners. These measurements will be the same if the floor is square.

Material Description	10' x 12' shed	10' x 16' shed
2x4 Joist Headers	2 pcs. 12'	2 pcs. 16'
2x4 Floor Joist	10 pcs. 10'	13 pcs. 10'
4x4 Treated Runners	3 pcs. 12'	6 pcs. 8'
Flooring 5/8" or 3/4"	4 pcs. 4x8	5 pcs. 4x8
Screw Floor Nails	1 lb. 8d	2 lb. 8d
Galv. Box Nails	1 lb. 16d	1 lb. 16d

Step 1 Assemble Trusses

1. Position (2) two half trusses between a 116-1/4" long 2x4 bottom cord.
2. Hold truss parts in place by temporarily screwing 2x4 blocks to the floor. There are short 2x4 blocks supplied in the kit for this purpose. Use the 2-1/2" wood screws.
3. Secure the tops together with a 22-3/4" long ridge block and wood gusset. Apply wood glue between the 2x4 boards and the gusset. Nail the gusset with (16) sixteen 6d common nails.
4. Secure the truss bottom legs to the bottom cord with wood gussets. **Note**: You may have to spread the truss bottom to fit the bottom 2x4. Use 12 nails per gusset.
5. Assemble (3) three more trusses.
6. Turn trusses over and apply wood gussets to the opposite side.



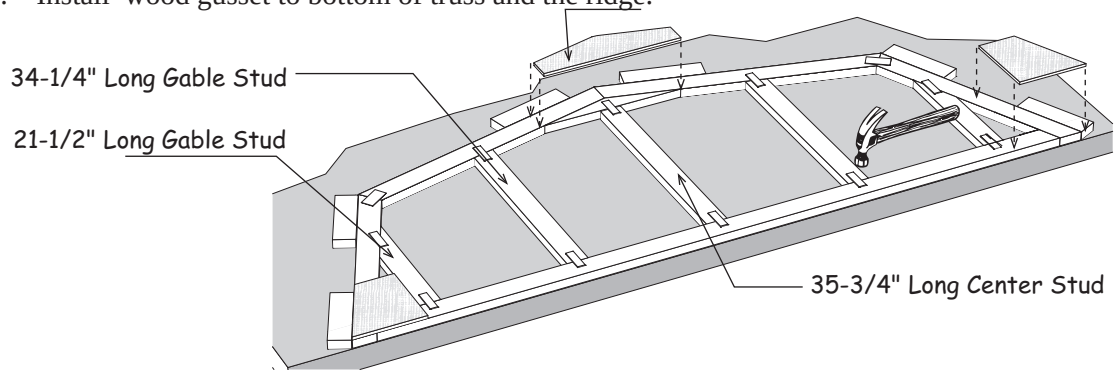


7. Assemble the last truss without the bottom cord. Locate wood gussets with a 2x4 block attached to one side.
8. Attach this block/gusset to the bottom of each truss leg. Secure to leg with 6d galv. nails and wood glue.
9. Turn truss over and apply gussets.

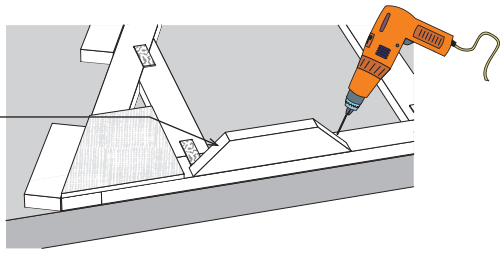
Do Not remove blocks from floor until **Step 2** is completed.

Step 2 Assemble Roof Gable Without Loft Doors

1. Position (2) two half trusses between a 116-1/4" long 2x4 bottom cord.
2. Secure 2x4 gable studs to the truss with (10) ten 1"x4" metal plates.
3. Install wood gusset to bottom of truss and the ridge.

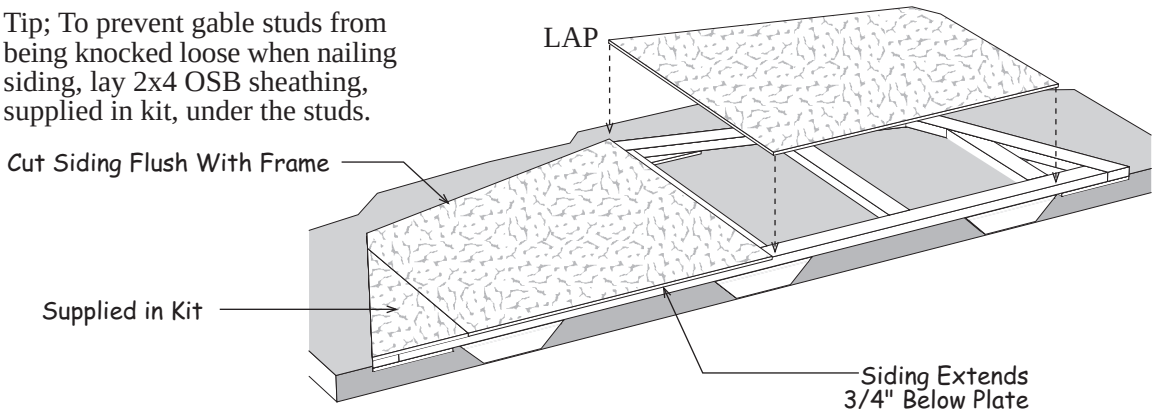


4. Screw (3) three 16" long 2x4 blocks across the bottom of the 2x4 bottom cord. Use 2-1/2" screws.



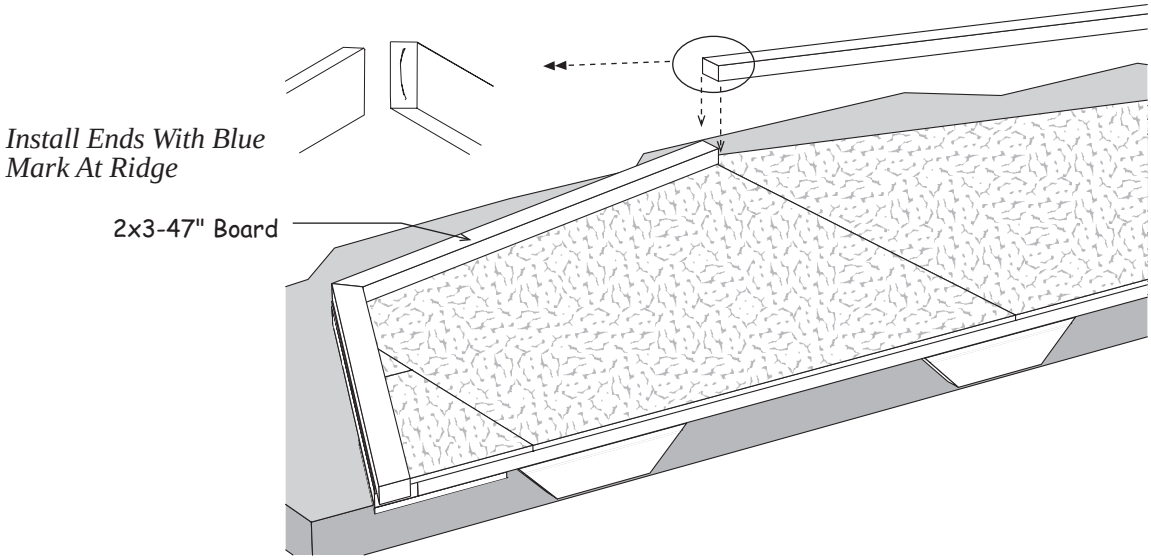
5. Turn the gable over. Cut a 4x8 siding panel in half creating (2) twO 4'x4' siding panels.
6. Install the siding extending 3/4" below the bottom 2x4. Cut the top flush with the top frame. Use 6d galv. nails. Space 12" apart.
7. Install pre-cut siding, *from our kit*, on the ends.

Tip; To prevent gable studs from being knocked loose when nailing siding, lay 2x4 OSB sheathing, supplied in kit, under the studs.

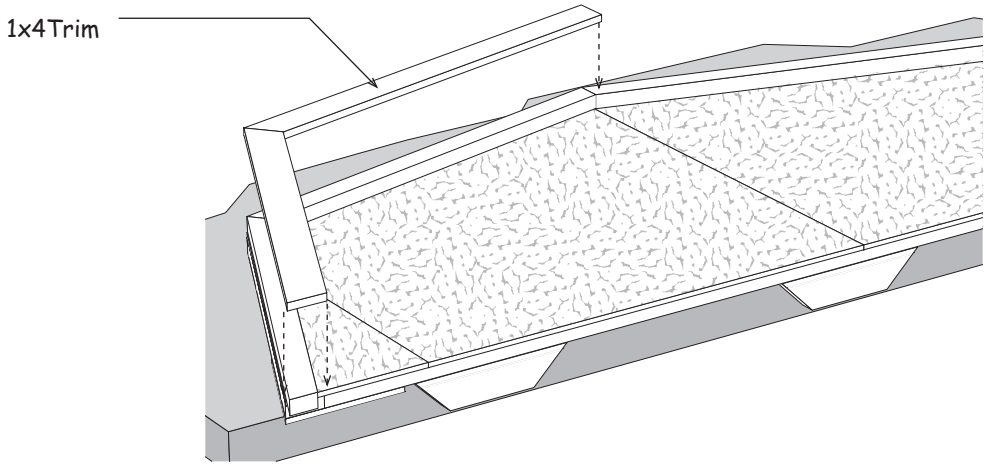


Step 3 Install Rear Gable Overhang & Trim

1. Apply 47" long 2x3 boards to the gable. These boards have a blue marking on one end. Install this end at the peak. Install boards flush with the top of the gable frame. Use 10d sinkers.
2. Install a 42-1/4" long 2x3 at the sides of the gable, flush with the frame.

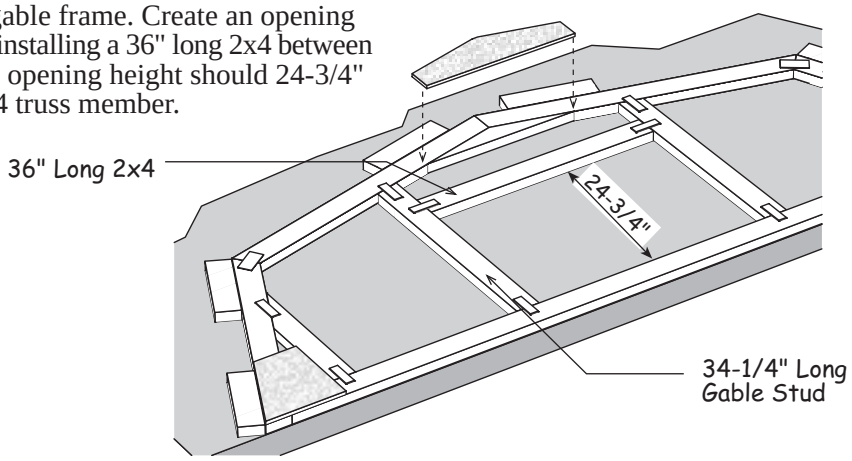


3. Apply 1x4 white pine trim to gable. Install a 47" long 1x4 at the top of the gable. These boards have a blue marking on one end. Install this end at the top. Install trim flush with the top of the gable frame. Use 8d galv. nails.
4. Install a 42-1/4" long 1x4 at the sides of the gable, flush with the frame.



Step 4 Assemble Roof Gable With Loft Doors

1. Assemble another gable frame. Create an opening for the loft doors by installing a 36" long 2x4 between the gable studs. The opening height should 24-3/4" from the bottom 2x4 truss member.



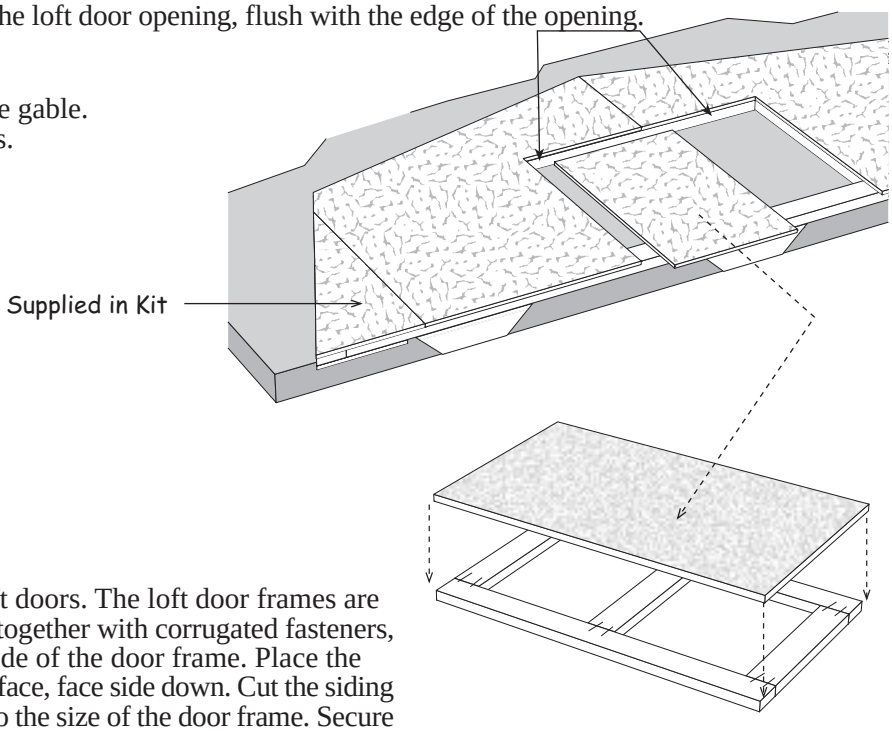
2. Turn gable over.

3. Cut a 4x8 siding panel in half for the center siding. Cut top flush with the gable frame.

☞ *If you don't need loft access from the outside, attach loft door frames to the gable to create a decorative look and weather tight storage area.*

4. Cut siding from the loft door opening, flush with the edge of the opening.

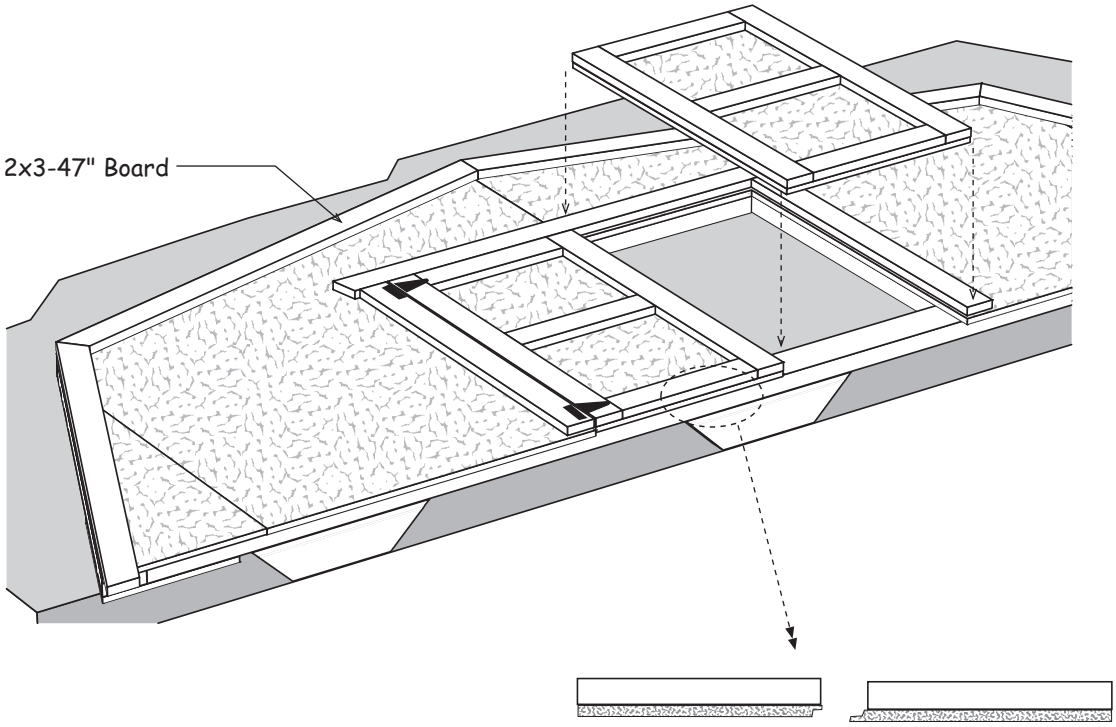
5. Nail siding on the gable. Use 6d galv. nails.



6. Assemble the loft doors. The loft door frames are temporarily held together with corrugated fasteners, this is the back side of the door frame. Place the doors on level surface, face side down. Cut the siding from above step to the size of the door frame. Secure the siding panel to the frame with 1" screws provided.

Step 5 Install Gable Trim & Loft Doors

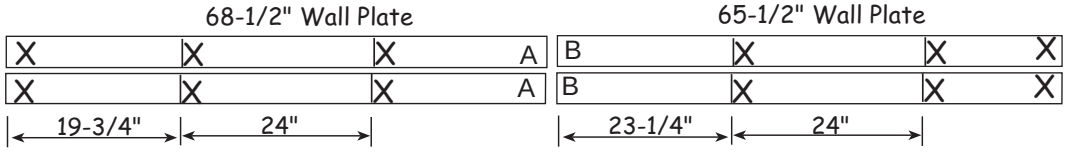
1. Apply 47" long 2x3 boards to the gable. These boards have a blue marking on one end. Install this end at the peak. Install boards flush with the top of the gable frame.
2. Install a 42-1/4" long 2x3 at the sides of the gable, flush with the frame.
3. Install 29-1/4" long 1x3 trim boards on each side of the loft door opening. Install a 43" long trim board across the top.
4. Install loft doors using 4" hinges and 1-1/4" long hinge screws. The screws have a square head. The bit is packed with the screws. Install barrel bolts to the inside top of the doors to prevent doors from opening.



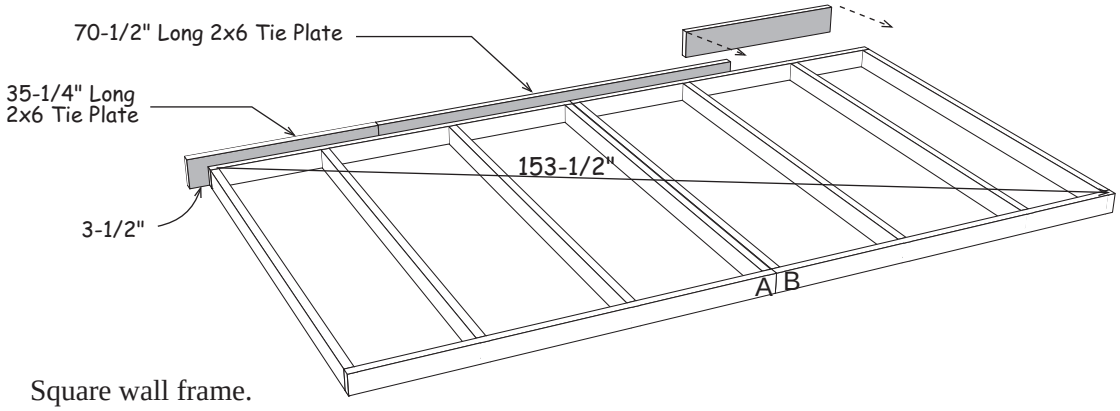
5. Apply 1x4 white pine trim to gable. Install a 47" long 1x4 at the top of the gable. These boards have a blue marking on one end. Install this end at the top. Install trim flush with the top of the gable frame. Use 8d galv. nails.
6. Install a 42-1/4" long 1x4 at the sides of the gable, flush with the frame.

Step 6 Assemble Back Wall

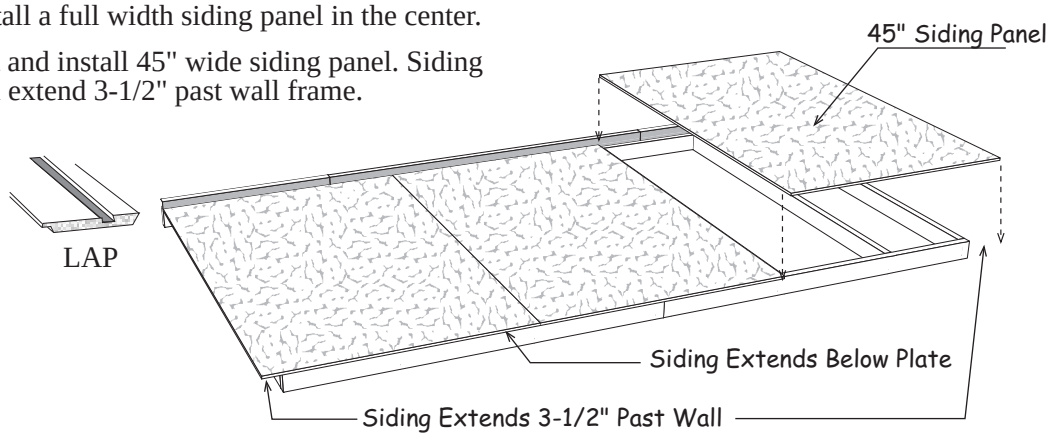
1. Position 68-1/2" and 65-1/2" long 2x4 boards together and indicate where the wall studs will be located. Mark the ends that will butt together with the letters 'A' and 'B'.



2. Install 72" long wall studs, between the wall plates, over the 'X' marks and where the plates meet. Use (2) two 10d sinkers at each end of stud. Nail wall frames together using 10d sinkers.
3. For a 12' long building, cut a 70-1/2" long 2x6 board in half so the center 2x6 tie plate will span where the sidewalls meet..
4. Install (2) two 35-1/4" and a 70-1/2" long 2x6 boards as tie plates over the top plate. The 2x6s will extend 3-1/2" beyond the end of the wall frame.



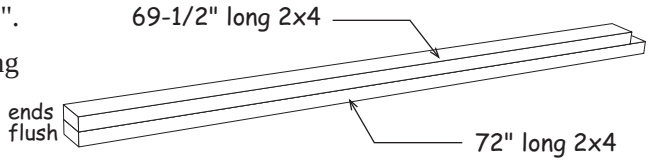
5. Square wall frame.
6. Cut (2) two 77-1/4" siding panels to a length of 75-3/4". Install the first siding panel with the 'LAP' edge extending 3-1/2" beyond the wall frame. Use the 8d galv. nails spaced 12" on center.
7. Install a full width siding panel in the center.
8. Cut and install 45" wide siding panel. Siding will extend 3-1/2" past wall frame.



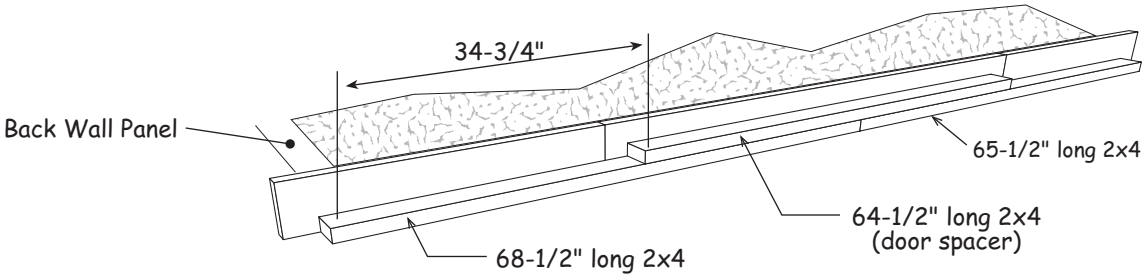
Step 7 Assemble Front Wall Panel

Assemble door header jacks and door spacer to aid in the door wall assembly.

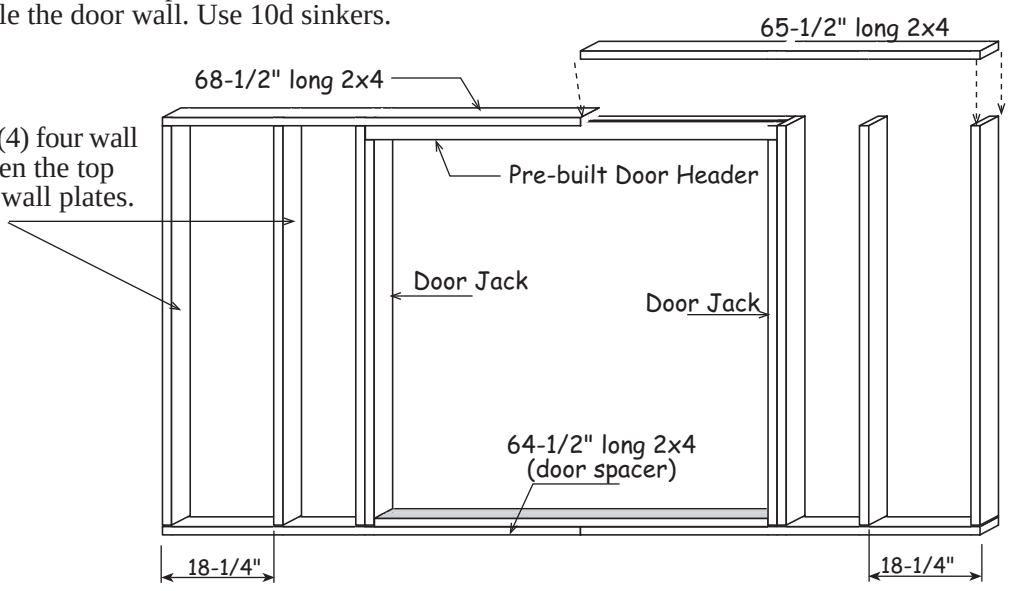
1. Cut (2) two 2x4-6' to a length of 69-1/2".
2. Assemble a door header jack by nailing a 69-1/2" long 2x4 to a 72" long 2x4. Use 10d sinkers.
3. Assemble another door jack.



4. Butt a 68-1/2" long 2x4 and a 65-1/2" long 2x4 together as shown below. **Important**; to keep the 2x4 aligned straight, place the 2x4 against a straight object. The top of the back wall, from **Step 6**, would be ideal.
5. Locate a 2x4 that was removed from the shipping pallet. Cut this 2x4 to a length of 64-1/2".



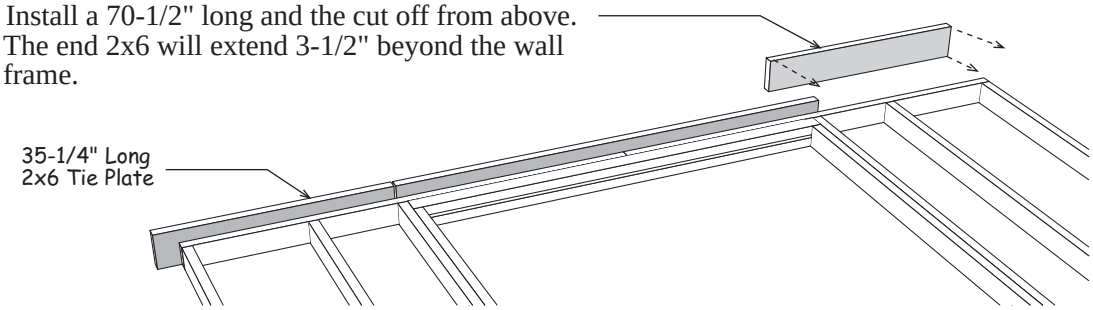
6. Install the 64-1/2" long 2x4, centered over the bottom 2x4s. The bottom 2x4s will extend 34-3/4" beyond the top 2x4 door spacer on both ends.
7. Gather 2x4s and components shown below and assemble the door wall. Use 10d sinkers.
8. Install (4) four wall studs between the top and bottom wall plates.



Step 7 Assemble Front Wall Panel Continued

9. For a 12' long building, cut a 70-1/2" long 2x6 board in half. Install one of the 2x6 boards so the left end is extending 3-1/2" beyond the wall frarme.

10. Install a 70-1/2" long and the cut off from above. The end 2x6 will extend 3-1/2" beyond the wall frame.



11. Cut (2) two 32-1/4" x 6" siding panels to a height of 4-1/2".

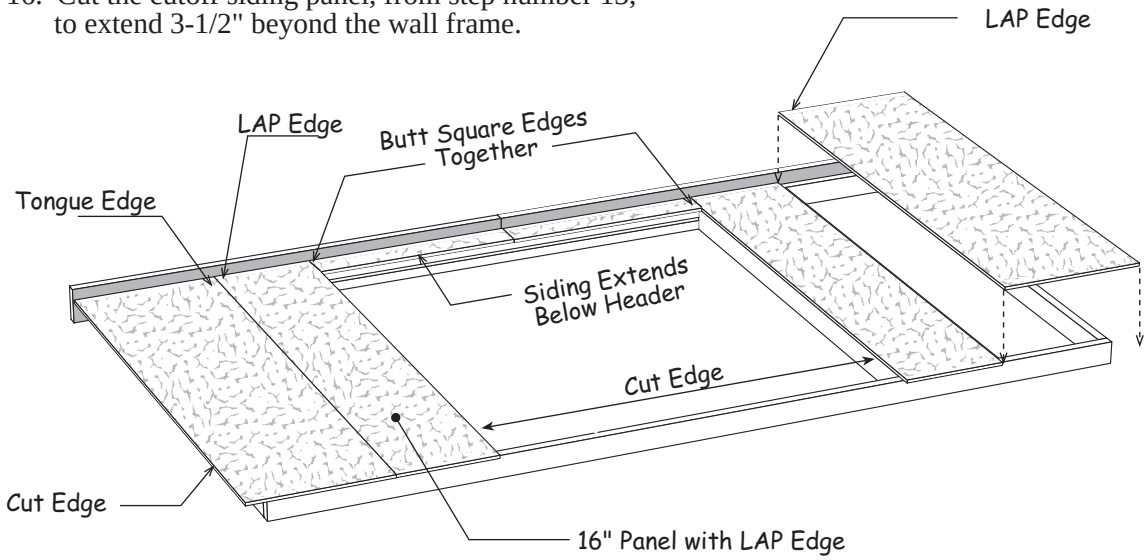
12. Locate a 16" wide siding panel that has a 'LAP' edge. Cut the siding to 75-3/4" length. Position the 'cut' edge flush with the left side of the door opening. Do not nail the LAP edge until the 'left' siding panel is applied.

13. Cut a full width siding panel width to 22-1/2", *measuring from the 'Tongue' edge*. Install the panel with the 'cut' edge extending 3-1/2" beyond the left end of the wall frame.

14. Cut another 16" wide panel to a length of 75-3/4" and install with the 'cut' edge flush with the right side of the door opening.

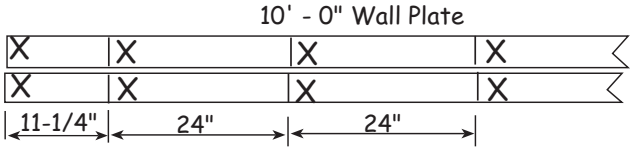
15. Install the 4-1/2" siding panels over the door opening.

16. Cut the cutoff siding panel, from step number 13, to extend 3-1/2" beyond the wall frame.

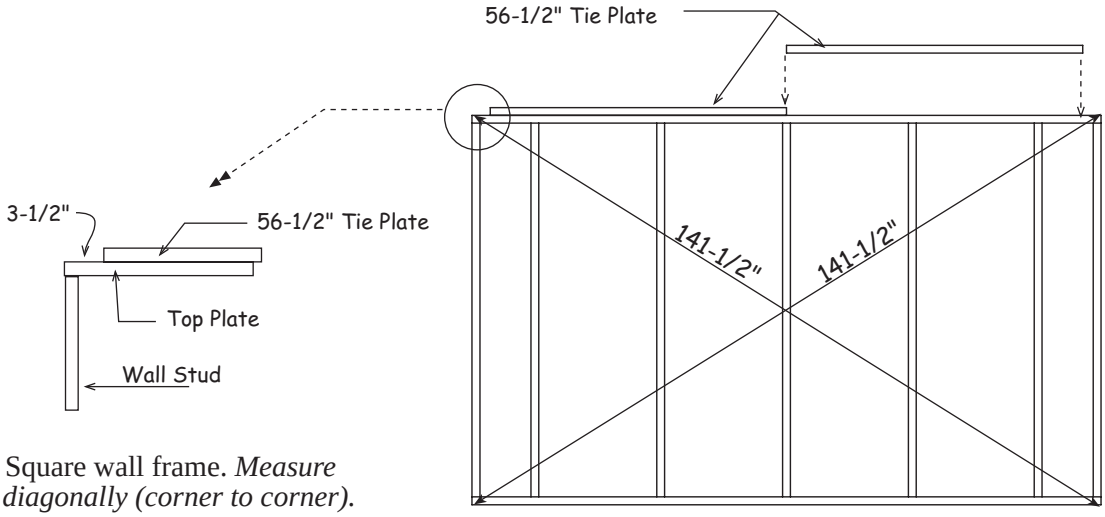


Step 8 Assemble End Walls

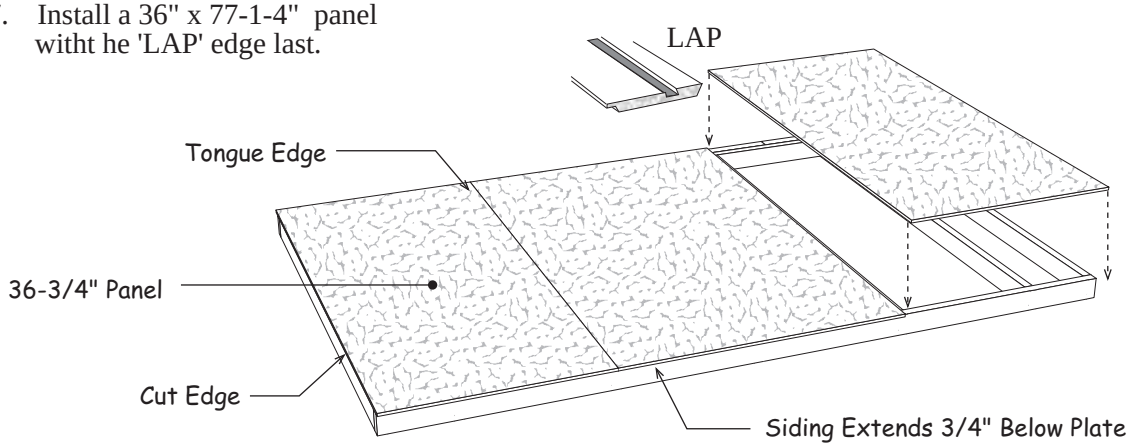
1. Position (2) two 2x4-10' boards together and indicate with 'X' marks, where the wall studs will be located.



2. Install 72" wall studs between the top and bottom plates.
3. Install (2) two 56-1/2" long 2x4s as tie plates over the top plate. The 2x4s will be 3-1/2" short of the end of the wall frame.

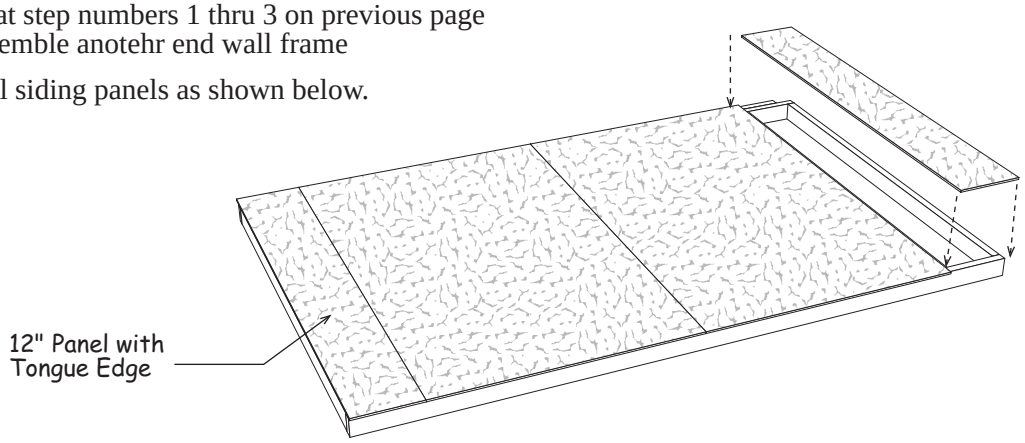


4. Square wall frame. *Measure diagonally (corner to corner).*
5. Locate a 36-3/4" x 77-1/4" siding panel with the 'Tongue' edge. Install the siding panel on the left corner, with the 'cut' edge flush with the end of the wall and flush with the top of the 2x4 tie plate. The siding should extend below the bottom plate.
6. Install a 48-3/4" x 77-1/4" siding panel in the center of the wall frame.
7. Install a 36" x 77-1-4" panel witht he 'LAP' edge last.



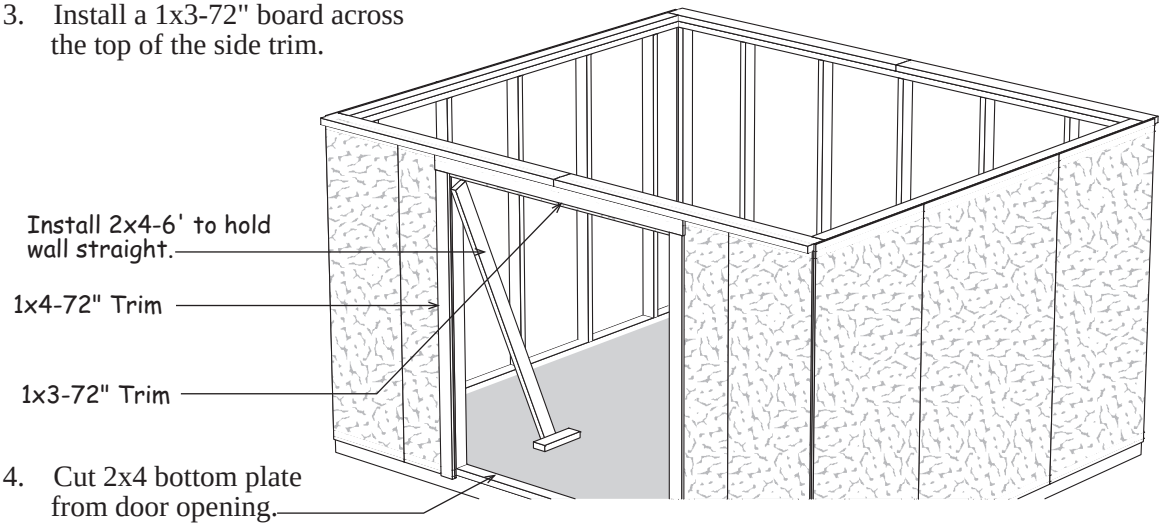
Step 8 Assemble End Walls Continued

8. Repeat step numbers 1 thru 3 on previous page to assemble anotehr end wall frame
9. Install siding panels as shown below.



Step 9 Set Lower Walls

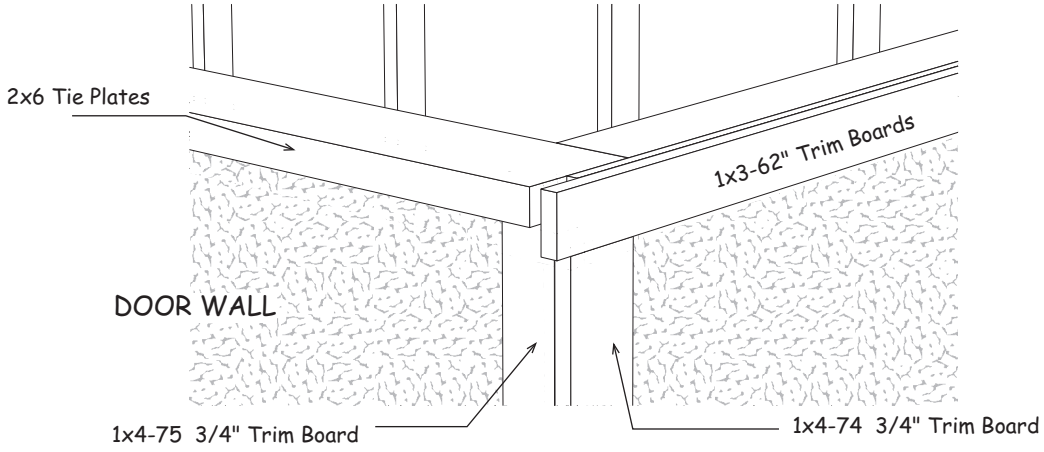
1. Secure wall panels together at the corners. Use (4) four 10d coated nails per corner. Nail wall panels to the floor. Nail through the bottom plate. Space 10d sinkers 24" apart.
2. Install (2) two 1x4-72" boards along each side of the door opening, flush with the bottom edge of the siding. Tack these boards with a couple nails; you may want to move the trim later when you install the doors. Use 8d galv. nails.
3. Install a 1x3-72" board across the top of the side trim.



4. Cut 2x4 bottom plate from door opening.

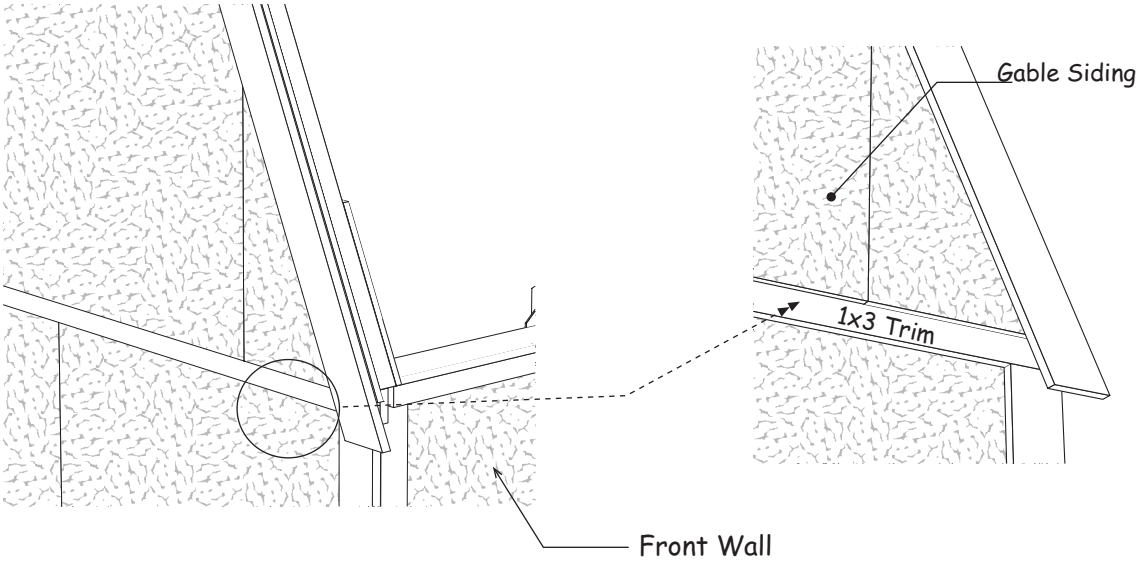
Step 10 Install Trim

1. Install (2) two 1x3-62" long trim boards flush with the top of the front wall. Use 8d galv. nails.
2. Install 1x4-75 3/4" trim boards at the corners of the front and back. Install the trim flush with siding on the end wall.
3. Install 1x4x74-3/4" trim boards at the corners of the front wall.



Step 11 Set Left Gable

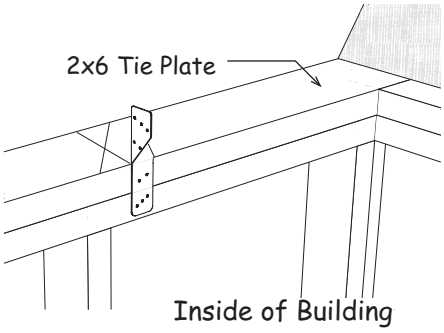
1. Install the gable on the left end wall. The gable siding will extend over the 1x3 trim on the lower wall. **NOT behind the trim!** Secure gable to wall by nailing through the gable blocks with 10d sinkers. Nail siding along the 1x3 trim board with 6d galv. nails.

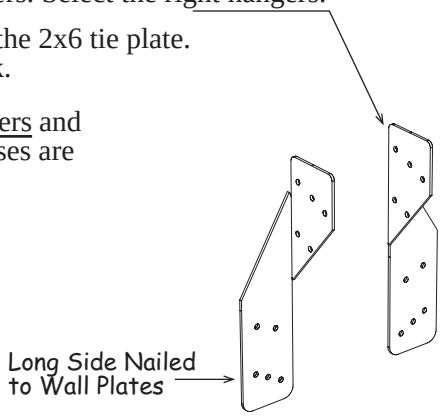


Step 12 Set Trusses

1. Layout the truss spacing on the front wall. Start at the left corner of the building. Measure from the inside face of the wood gusset when marking the location of the first truss. See next page.
2. Locate the truss hangers, there are left and right hangers. Select the right hangers.
3. Using 1-1/2" hanger nails, install the right hangers to the 2x6 tie plate. The top hanger flange should line up with the 'X' mark.

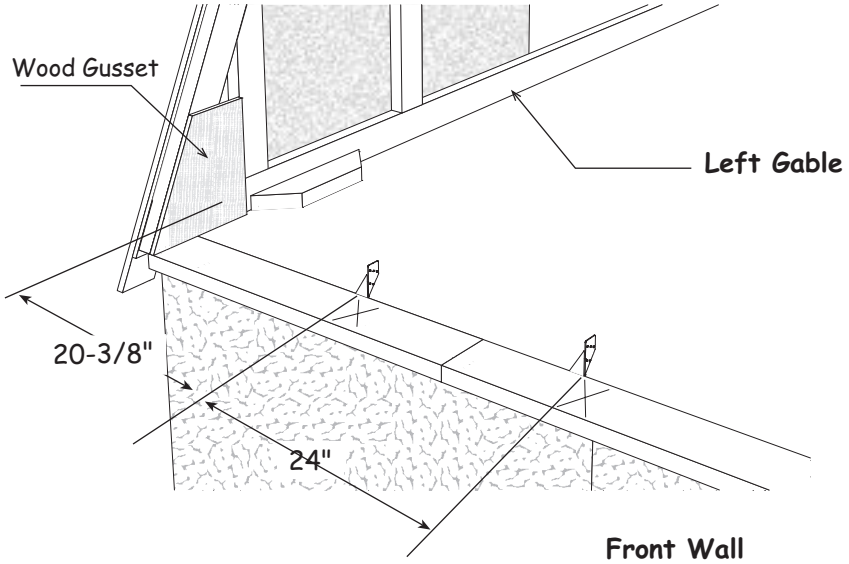
Important: When marking the back wall, use the left hangers and place the 'X' mark on the same side of the line so your trusses are parallel when they are installed.

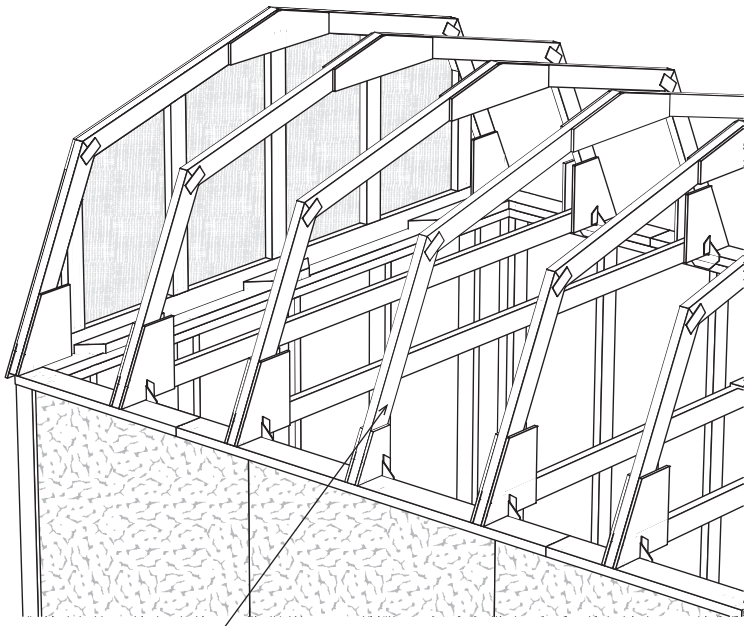




Step 12 Set Trusses Continued

4. Install the trusses over the 'X' marks. Install hanger to the opposite side of the trusses. Secure truss to metal hangers using 1-1/2" hanger nails.



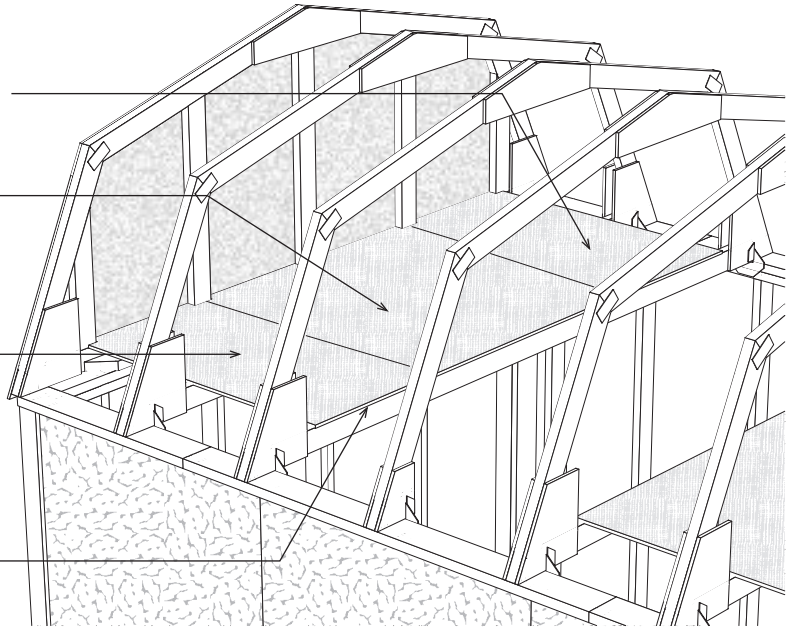


☞ Note: The center truss will not have a bottom cord.

Step 13 Install Trusses & Loft Floor

1. Install front gable.

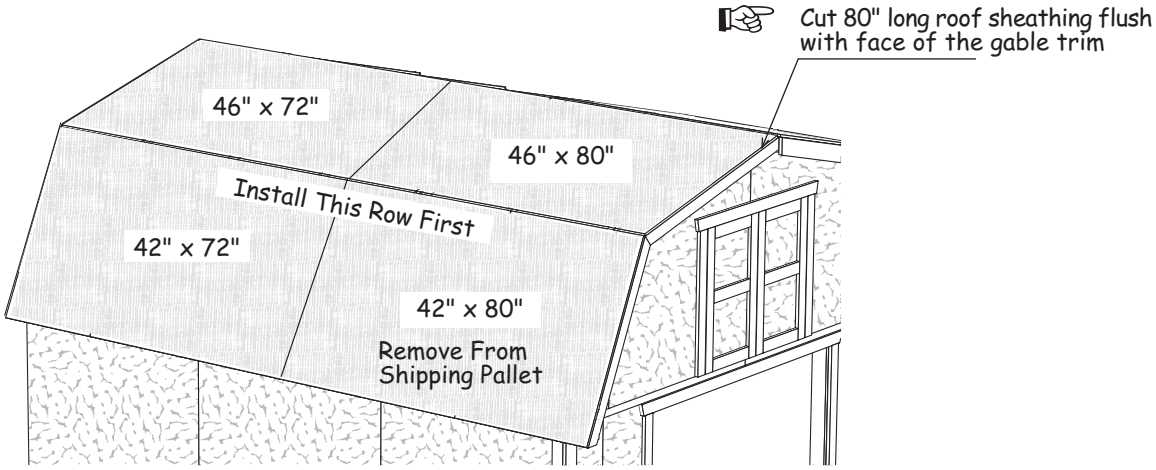
2. Install OSB loft flooring over the rear and front trusses. Notch the flooring around the gable studs on the rear and front gables. Secure floor with 7d sinkers. Note: Some OSB panels may be attached to the shipping pallet.

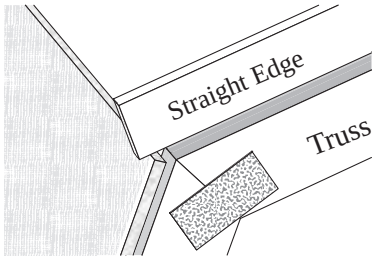


Step 14 Install Roof Sheathing

Install roof sheathing on the steep side of the roof. Use a straight edge to align the top of the sheathing with the top of the truss. See Detail 'B'. Make sure the trusses are plumb and the roof sheathing meets the center of the truss. Use 7d sinkers spaced 12" apart.

Install first sheet flush with back gable trim. Work back to front. The top roof sheathing will not extend to the ridge. This will allow an opening for air ventilation when you install a ridge vent.


Cut 80" long roof sheathing flush with face of the gable trim
46" x 72"
46" x 80"
Install This Row First
42" x 72"
42" x 80"
Remove From Shipping Pallet



Detail 'B'

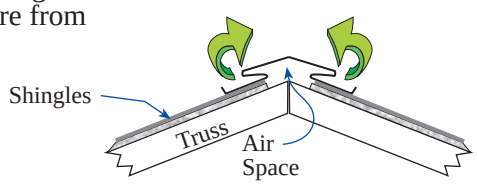
Install Shingles - not included in kit

1. Install felt paper and metal roof edge the permitter of the building.

2. Install shingles according to the instructions on the wrapper. If you need more detailed instructions on installing shingles, there are good publications at book stores or newsstands.

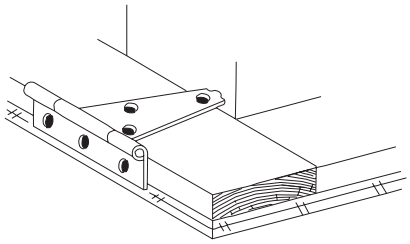
Building Tip: Install ridge vent in lieu of shingles caps. Ridge vent provides ideal ventilation, preventing heat or moisture from damaging your building or its contents.

Material Description	Building Length	
	10'x12'	10'x16'
Roof Shingles	7 bdl.	10 bdl.
Roof 'drip' Edge	6 pcs.	7 pcs.

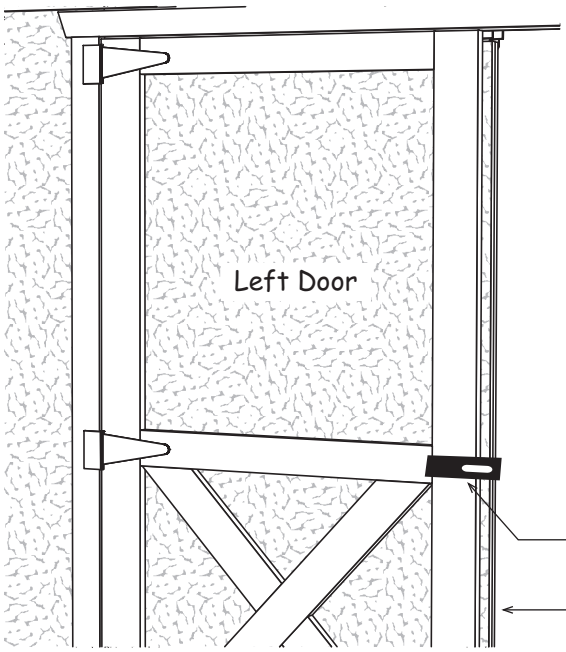


Ridge vent provides ideal ventilation.

Step 15 Install Doors & Hardware

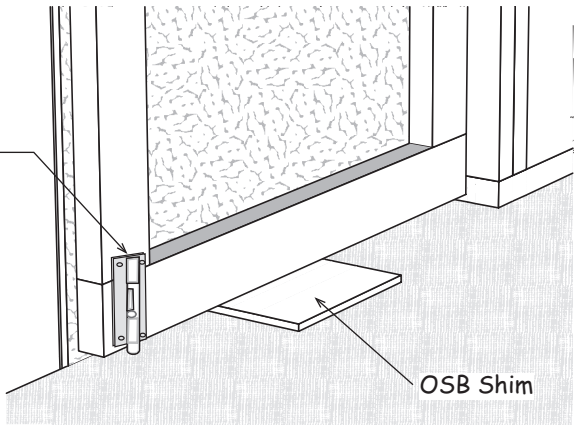


1. Lay the left door with the trim facing up. The siding on the left door extends past the door trim. See detail below.
2. Install 5" hinges to the left side of the door frame. To position the hinge properly, hold the rectangular plate against the frame. Use 1-3/4" black screws.
3. Install hinges to the right side of the other door.



4. Before you fasten the hinges to the door trim, temporarily prop the doors in the opening. Leave a space at the top of the doors and between the doors and the side trim to allow room for the doors to expand when they absorb moisture.

   If your door opening is out of square, the space around the doors will not be even. You can remove and reposition the side trim to make allowances for this. The side trim does not have to be flush with the frame of the door opening. You can move the trim in or out to make the door spacing equal.
5. Install hinges to trim with 2" screws.



6. Install a barrel bolt on the lower back of the door to secure this door in place when closed. You will need to drill a hole for the round shaft to drop into.
7. Install another barrel bolt at the top of the door.

Meadowbrook and Woodville 10'x 12' Barn kit

Qty.	***2x4 & 2x6 Framing***	Size
4	Wall Plates	120 "
8	Truss - Bottom Cords	116 1/4"
8	2x4 Boards Attached to Pallet	80 "
31	Wall Studs black ends	72 "
4	Wall Plates	68 1/2"
4	Wall Plates	65 1/2"
4	Wall Plates	56 1/2"
1	Gable Studs & Framing	36 "
1	Gable Studs & Framing	35 3/4"
4	Gable Studs & Framing	34 1/4"
4	Gable Studs & Framing	21 1/2"
9	Truss Ridge Blocks	22 3/4"
6	Gable Nailing Blocks	15 3/4"
4	2x6 Tie Plates for Sidewalls	70 1/2"
	2x3 Framing	
4	Gable Overhangs	47 "
4	Gable Overhangs	42 1/4"
2	Gable Blocks	6 1/4"
	Pre-built Components	
14	Pre-built Truss Halves	
2	32" x 72" Pre-built Barn Doors	
2	18" x 29" Loft Door Frames	
1	2x3 Door Header	67-1/2"
	Loft Floor & Roof Sheathing	
2	42" x 80"	2 42" x 72"
2	46" x 80"	2 46" x 72"
2	48" x 48"	4 24" x 48"
	Miscellaneous Lumber	
12	Wood Truss Ridge Gussets	8" x 24"
20	Wood Bottom Truss Gussets	12" x 12"

Qty.	Description		Size
	Whie Pine Trim		
4	1x4 Gable Trim		47 1/2"
4	1x4 Gable Trim		43 "
4	1x4 Corner Trim		75 3/4"
4	1x4 Corner Trim		74 3/4"
2	1x4 Door Trim		72 "
1	1x3 Top Door Trim		72 "
4	1x3 Lower Wall Trim		62 "
2	1x3 Loft Door Trim		29 1/4"
1	1x3 Loft Door Trim		43 "
	Exterior Siding & Soffit		
3	48" x 77-1/4"	2	12" x 77-1/4"
2	36" x 77-1/4"	4	48" x 75-3/4"
2	16" x 77-1/4"	2	6" x 32-1/4"
4	Siding for Roof Gables		48" x 48"
4	Siding for Roof Gables		16" x 30"
2	Siding For Door Header		6" x 32-3/4"
4	8" x 48" Front Soffit Panels (Woodville model)		
	Hardware		
3	lb. 10d Sinkers	20	Truss Hangers
3	lb. 8d Galv.	75	Hinge Screws
2	lb. 7d Sinkers	1	Door Hasp
3	lb. 6d Common	2	4" Barrel Bolts
1	lb. 6d Galv.	2	6" Barrel Bolts
3	lb. Hanger Nails	12	2-1/2" Screws
4	4" Door Hinges	36	1" Screws
6	5" Door Hinges	24	1-5/8" Screws
22	1x4 Drive-on Plate		
	Miscellaneous		
2	Center Truss Blocks w/gusset		3-1/2"x7-1/2"

Roof Material by Owner

Roof Shingles	7 bdl.
Roof 'drip' Edge	6 pcs.